

Safety Attribute Inspection (SAI) Data Collection Tool
3.2.2 Flight / Load Manifest / Weight and Balance Control (OP)

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder's responsibility):

- To ensure that the certificate holder loads its aircraft according to the approved loading plan, the aircraft are loaded within the weight and balance limitations of the Aircraft Flight Manual, and the load manifest is accurately prepared and retained in accordance with 14 CFR 121.695.

Objective (FAA oversight):

- To determine if the certificate holder's Flight / Load Manifest / Weight and Balance Control process meets all applicable requirements of Title 14 of the Code of Federal Regulations (14 CFR) and FAA policies.
- To determine if the certificate holder's Flight / Load Manifest / Weight and Balance Control process incorporates the safety attributes.
- To identify any shortfalls in the certificate holder's Flight / Load Manifest / Weight and Balance Control process.

Specific Instructions:

- Intentionally left blank

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
 - 119.43(b)
 - 119.43(b)(1)
 - 119.43(b)(2)
 - 119.43(c)
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(2)
 - 121.135(b)(21)
 - 121.135(b)(3)
 - 121.135(b)(9)
 - 121.153(b)
 - 121.198(a)
 - 121.198(c)
 - 121.665
 - 121.693(a)
 - 121.693(b)(1)
 - 121.693(b)(2)
 - 121.693(b)(3)
 - 121.693(b)(4)
 - 121.693(c)
 - 121.693(d)
 - 121.693(e)

- SRRs:
 - 121.695(a)(1)
 - 121.695(a)(2)
 - 121.695(a)(3)
 - 121.695(b)
 - 121.697(a)(1)
 - 121.697(a)(2)
 - 121.697(a)(3)
 - 121.697(a)(4)
 - 121.697(a)(5)
 - 121.697(b)
 - 121.697(c)
 - 121.697(d)
 - 121.697(e)(1)
 - 121.697(e)(2)
 - A.096
 - A.097
 - A.098
 - A.099
 - E.096
 - E.096Weight and Balance Control Procedures

Related CFRs & FAA Policy/Guidance:

- Related CFRs:
 - Intentionally left blank
- FAA Policy/Guidance:
 - FAA Order 8900.1, Volume 6, Chapter 2, Section 3
 - FAA Order 8900.1, Volume 6, Chapter 2, Section 4
 - FAA Order 8900.1, Volume 6, Chapter 2, Section 5
 - FAA Order 8900.1, Volume 6, Chapter 2, Section 9
 - FAA Order 8900.1, Volume 6, Chapter 2, Section 10
 - Advisory Circular AC 120-27E

SAI Section 1 - Procedures Attribute

Objective: Procedures, instructions, and information are documented methods for accomplishing a process. The certificate holder's policies should establish their compliance posture. Policies may be stand-alone statements, or they may be imbedded within procedures, instructions, or information regarding a particular regulatory requirement. The questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated questions regarding who, what, when, where, and how. This section contains policy questions, procedural questions, and instructional or informational questions pertaining to various types of certificate holder requirements such as actions, prohibitions, or resources (i.e., personnel, facilities, equipment, technical data, etc.).

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the duties and responsibilities for management and other personnel identified by the certificate holder who accomplishes the Flight/Load Manifest/Weight and Balance Control process.
3.	Review the certificate holder's Flight/Load Manifest/Weight and Balance Control process to ensure it contains the policies, procedures, instructions and information necessary for personnel to perform their duties and responsibilities with a high degree of safety.

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's Flight/Load Manifest/Weight and Balance Control process meet the specific regulatory and FAA policy requirements:	
1.1.	<p>Does the certificate holder document instructions and information about the preparation and signature of documents before each aircraft takeoff by employees who are authorized to supervise the loading process?</p> <p>SRRs: 121.135(b)(9); 121.135(b)(21); 121.665</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system has methods and procedures to assign responsibility for the preparation and accuracy of the load manifest form before each takeoff. <i>Sources:</i> 121.135(b)(21); 121.665 <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP); 7.1.4(OP) 2. Check that the Certificate Holder's manual system includes methods and procedures to ensure that the load manifest form is prepared and signed for each flight by an employee who has the duty of supervising the loading of aircraft and preparing the load manifest forms or by another qualified person authorized by the Certificate Holder. <i>Sources:</i> 121.135(b)(21); 121.665 <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.3(OP); 3.1.8(OP); 3.2.1(OP) 3. Check that the Certificate Holder's manual system has instructions and information to its personnel to ensure that the load manifest form is prepared and signed for each flight by an employee of the Certificate 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p>Holder who has the duty of supervising the loading of aircraft and preparing the load manifest forms or by another qualified person authorized by the Certificate Holder.</p> <p><i>Sources:</i> 121.135(a)(1); 121.665</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.3(OP); 3.1.8(OP); 3.2.1(OP)</p>	
1.2.	<p>Does the certificate holder's system require cargo weights provided by air freight forwarders to be checked for accuracy?</p> <p>SRRs: 121.665</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	<p>Does the certificate holder's system ensure the Load Manifest contains the following information at takeoff:</p>	
1.3.1.	<p>The weight of the aircraft, fuel and oil, cargo and baggage, passengers and crewmembers?</p> <p>SRRs: 121.693(a)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system has methods and procedures to ensure the load manifest contains the weight of the aircraft at takeoff time. <i>Sources:</i> 121.135(b)(21); 121.693(a) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 2. Check that the Certificate Holder's manual system has methods and procedures to ensure the load manifest contains the weight of the fuel and oil at takeoff time. <i>Sources:</i> 121.135(a)(1); 121.693(a) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 3. Check that the Certificate Holder's manual system has methods and procedures to ensure the load manifest contains the weight of the cargo and baggage at takeoff time. <i>Sources:</i> 121.135(b)(21); 121.693(a) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 4. Check that the Certificate Holder's manual system has methods and procedures to ensure the load manifest contains the weight of the passengers and crewmembers at takeoff time. <i>Sources:</i> 121.135(b)(21); 121.693(a) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 5. Check that the Certificate Holder's manual system has instructions and information to its personnel to ensure the load manifest contains the weight of the fuel and oil at takeoff time. <i>Sources:</i> 121.135(a)(1); 121.693(a) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 6. Check that the Certificate Holder's manual system has instructions and information to its personnel to ensure the load manifest contains the weight of the cargo and baggage at takeoff time. <i>Sources:</i> 121.135(a)(1); 121.693(a) 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p> <p>7. Check that the Certificate Holder's manual system has instructions and information to its personnel regarding to ensure the load manifest contains the weight of the passengers and crewmembers at takeoff time.</p> <p><i>Sources:</i> 121.135(a)(1); 121.693(a)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	
1.3.2.	<p>The maximum allowable takeoff weight for the runway intended to be used, and include corrections for altitude, gradient, wind, and temperature conditions existing at the time of takeoff?</p> <p>SRRs: 121.693(b)(1)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system contains methods and procedures to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports.</p> <p><i>Sources:</i> 121.135(b)(21); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p> <p>2. Check that the Certificate Holder's manual system has instructions and information to its personnel, to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports.</p> <p><i>Sources:</i> 121.135(a)(1); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, Explain</p>
1.3.3.	<p>The maximum takeoff weight, considering anticipated fuel and oil consumption,</p>	<p><input type="checkbox"/> Yes</p>

	<p>to comply with any applicable enroute performance limitations? SRRs: 121.693(b)(2) <i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system contains methods and procedures to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports. <i>Sources:</i> 121.135(b)(21); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 2. Check that the Certificate Holder's manual system has instructions and information to its personnel, to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports. <i>Sources:</i> 121.135(a)(1); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4) <i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP) 	<input type="checkbox"/> No, Explain
<p>1.3.4.</p>	<p>The maximum takeoff weight, considering anticipated fuel and oil consumption, to comply with the maximum authorized landing weight limitations on arrival at the destination airport? SRRs: 121.693(b)(3) <i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system contains methods and procedures to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p>design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports.</p> <p><i>Sources:</i> 121.135(b)(21); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p> <p>2. Check that the Certificate Holder's manual system has instructions and information to its personnel, to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports.</p> <p><i>Sources:</i> 121.135(a)(1); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	
<p>1.3.5.</p>	<p>The maximum takeoff weight, considering anticipated fuel and oil consumption, to comply with landing distance limitations on arrival at the destination and alternate airports?</p> <p>SRRs: 121.693(b)(4)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system contains methods and procedures to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports.</p> <p><i>Sources:</i> 121.135(b)(21); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p> <p>2. Check that the Certificate Holder's manual system has instructions and information to its personnel, to ensure that the maximum allowable weight on the load manifest for any flight does not exceed the least of the following weights at takeoff time: (1) Maximum allowable takeoff weight for the runway intended to be used (including corrections for</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, Explain</p>

	<p>altitude, runway gradient, wind, and temperature existing at takeoff time). (2) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with applicable en route performance limitations. (3) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with the maximum authorized design landing weight limitations on arrival at the destination airport. (4) Maximum takeoff weight considering anticipated fuel and oil consumption that allows compliance with landing distance limitations on arrival at the destination and alternate airports.</p> <p><i>Sources:</i> 121.135(a)(1); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	
1.3.6.	<p>The total weight as computed by authorized personnel using an approved procedure?</p> <p>SRRs: 121.693(c)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system has instructions and information to its personnel to ensure the load manifest contains the total weight computed under approved procedures. <p><i>Sources:</i> 121.135(a)(1); 121.693(c)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p> <ol style="list-style-type: none"> 2. Check that the Certificate Holder's manual system includes methods and procedures to ensure the load manifest contains the total weight computed under approved procedures. <p><i>Sources:</i> 121.135(b)(21); 121.693(c)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.7.	<p>Evidence that the aircraft is loaded according to the approved schedule to ensure that the center of gravity is within approved limits?</p> <p>SRRs: 121.693(d)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system has instructions and information to its personnel to ensure that the load manifest contains evidence that the aircraft is loaded according to an approved schedule that ensures the center of gravity is within approved limits at takeoff time. <p><i>Sources:</i> 121.135(a)(1); 121.693(d)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p> <ol style="list-style-type: none"> 2. Check that the Certificate Holder's manual system includes methods and procedures that ensure the load manifest contains evidence that the aircraft is loaded according to an approved schedule that ensures the center of gravity is within approved limits at takeoff time. <p><i>Sources:</i> 121.135(b)(21); 121.693(d)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

1.3.8.	<p>Names of passengers, unless the certificate holder maintains this information by another means?</p> <p>SRRs: 121.135(b)(9); 121.135(b)(21); 121.693(e)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system has instructions and information to its personnel ensuring the load manifest contains the names of passengers at takeoff time unless such information is maintained by other means by the Certificate Holder.</p> <p><i>Sources:</i> 121.135(a)(1); 121.693(e)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.8(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4.	<p>Does the certificate holder's system, for domestic and flag operations, contain instructions and information for the pilot in command to carry to the destination a copy of the load manifest, a copy of the dispatch release, and a copy of the flight plan?</p> <p>SRRs: 121.695(a)(1); 121.695(a)(2); 121.695(a)(3)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system has instructions and information to its personnel for the pilot in command of an airplane to carry a copy of the completed load manifest (or information from it, except information concerning cargo and passenger distribution) to its destination.</p> <p><i>Sources:</i> 121.135(a)(1); 121.695(a)(1)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.3(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.5.	<p>Does the certificate holder's system, for domestic and flag operations, contain instructions and information that copies of the load manifest, the dispatch release, and the flight plan be retained for three months?</p> <p>SRRs: 121.695(b)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system has instructions and information to its personnel to retain copies of the records required in FAR 121.695 for at least three months.</p> <p><i>Sources:</i> 121.135(a)(1); 121.695(b)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 3.1.3(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.6.	<p>When conducting supplemental operations, does the certificate holder's system contain instructions and information for the pilot in command to carry to the destination the original or a signed copy of the load manifest, the flight release, the airworthiness release, the pilot route certification, and a completed flight plan?</p> <p>SRRs: 121.697(a)(1); 121.697(a)(2); 121.697(a)(3); 121.697(a)(4); 121.697(a)(5)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system has instructions and information to its personnel requiring the pilot in command of an airplane to carry to its destination the original or a signed copy of the load manifest.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable

	<p><i>Sources:</i> 121.135(a)(1); 121.697(a)(1)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 2.1.5(AW); 2.1.5(OP); 3.1.3(OP); 3.2.1(OP)</p>	
1.7.	<p>If a supplemental flight originates at the principal base of operations, does the certificate holder's system contain instructions and information to retain a signed copy of the load manifest, the flight release, the airworthiness release, the pilot route certification, and an original or a copy of the flight plan at the main base?</p> <p>SRRs: 121.697(b)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system has instructions and information to its personnel that if a flight originates at the Certificate Holder's principal base of operations, it shall retain at that base a signed copy of each document listed in FAR 121.697(a). <p><i>Sources:</i> 121.135(a)(1); 121.697(b)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 2.1.5(AW); 2.1.5(OP); 3.1.3(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.8.	<p>If the supplemental flight originates at a place other than the principal base of operation, does the certificate holder's system contain instructions and information to send a signed copy of the load manifest to the main base, original or a signed copy of the flight release, the airworthiness release, a copy of the pilot route certification and an original or a copy of the completed flight plan?</p> <p>SRRs: 121.697(c)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the certificate holder's manual system includes methods and procedures, except as provided in FAR 121.697(d), that if a flight originates at a place other than the certificate holder's principal base of operations, the pilot in command (or another person not aboard the airplane who is authorized by the certificate holder) shall, before or immediately after departure of the flight, mail signed copies of the documents listed in FAR 121.697(a), to the principal base of operations. <p><i>Sources:</i> 121.135(a)(1); 121.697(c)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 2.1.5(AW); 2.1.5(OP); 3.1.3(OP); 3.2.1(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.9.	<p>When conducting supplemental operations at a place other than the principal base, does the certificate holder's system contain instructions and information to ensure that signed copies of the documents required by 14 CFR 121.697 are retained at that location for not more than 30 days before they are sent to the principal base?</p> <p>SRRs: 121.697(d)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual system has instructions and information to its personnel that, if a flight originates at a place other than the Certificate Holder's principal base of operations, and there is at that place a person to manage the flight departure for the Certificate Holder who does not himself or herself depart on the airplane, signed copies of the documents listed in FAR 121.697(a) may be retained at 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable

	<p>that place for not more than 30 days before being sent to the Certificate Holder's principal base of operations. However, the documents for a particular flight need not be further retained at that place or be sent to the principal base of operations, if the originals or other copies of them have been previously returned to the principal base of operations.</p> <p><i>Sources:</i> 121.135(a)(1); 121.697(d)</p> <p><i>Interfaces:</i> 1.3.17(AW); 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 2.1.5(AW); 2.1.5(OP); 3.1.3(OP); 3.2.1(OP)</p>	
1.10.	<p>Does the certificate holder conducting supplemental operations reference in its system the persons having custody of the copies of documents retained in accordance with 14 CFR 121.697(d)?</p> <p>SRRs: 121.697(e)(1); 121.697(e)(2)</p> <p><i>Related Design JTIs:</i></p> <p>1. Check that the Certificate Holder's manual system, when conducting supplemental operations, has instructions and information to its personnel that identifies the person having custody of the copies of documents retained in accordance with FAR 121.697(d).</p> <p><i>Sources:</i> 121.135(a)(1); 121.697(e)(1)</p> <p><i>Interfaces:</i> 2.1.1(AW); 2.1.1(OP); 2.1.2(AW); 2.1.2(OP); 2.1.5(AW); 2.1.5(OP); 3.1.4(OP); 3.2.1(OP); 7.1.4(OP)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.11.	<p>If the certificate holder operates an aircraft in cargo service that has been approved for an increased zero fuel weight in accordance with 14 CFR 121.198, does the certificate holder document instructions and information to ensure that the zero fuel weight increase does not exceed five percent, and the increase in the structural landing weight does not exceed the amount, in pounds, of the increase in zero fuel weight? Note: This applies to the DC-6A, DC-6B, DC-7B, and DC-7C; and L1049B, C, D, E, F, G, and H, and the L1649A when modified in accordance with supplemental type certificate SA 4-1402.</p> <p>SRRs: 121.135(b)(21); 121.198(a); 121.198(c)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.12.	<p>Does the certificate holder document instructions and information to ensure that it maintains control of the weight and balance of its aircraft in accordance with the procedures approved in operations specifications paragraph E096?</p> <p>SRRs: E.096Weight and Balance Control Procedures</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.13.	<p>Does the certificate holder's system contain procedures, when actual passenger and baggage weights are used, that are in accordance with their Approved Weight and Balance Control program?</p> <p>SRRs: 121.135(b)(21); A.096</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.14.	<p>Does the certificate holder's system contain procedures, when a combination of actual, standard average (or segmented), or survey-derived average weights for passenger and baggage weights are used that are in accordance with their Approved Weight and Balance Control program?</p> <p>SRRs: 121.135(b)(21); A.097; A.098; A.099</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.15.	<p>Does the certificate holder's Flight / Load Manifest / Weight and Balance Control process comply with the guidance contained in FAA Order 8900.1, Volume 6, Chapter 2, Section 3?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.16.	<p>Does the certificate holder's Flight / Load Manifest / Weight and Balance Control process comply with the guidance contained in FAA Order 8900.1, Volume 6, Chapter 2, Section 4?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

1.17.	Does the certificate holder's Flight / Load Manifest / Weight and Balance Control process comply with the guidance contained in FAA Order 8900.1, Volume 6, Chapter 2, Section 5?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.18.	Does the certificate holder's Flight / Load Manifest / Weight and Balance Control process comply with the guidance contained in FAA Order 8900.1, Volume 6, Chapter 2, Section 9?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.19.	Does the certificate holder's Flight / Load Manifest / Weight and Balance Control process comply with the guidance contained in FAA Order 8900.1, Volume 6, Chapter 2, Section 10?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.20.	Does the certificate holder's Flight / Load Manifest / Weight and Balance Control process comply with the guidance contained in FAA Advisory Circular 120-27E?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.21.	Does the certificate holder s manual contain the required references to, or excerpts from, the operations specifications listed in the Supplemental Information section of this safety attribute inspection (SAI)? SRRs: 119.43(b)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.22.	If the certificate holder's manual includes excerpts from its operations specifications, are the excerpts clearly identified as part of the operations specifications? SRRs: 119.43(b)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.23.	Does the certificate holder s manual require compliance with operations specifications listed in the Supplemental Information section of this safety attribute inspection (SAI)? SRRs: 119.43(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.24.	Does the certificate holder s Flight / Load Manifest / Weight and Balance Control process contain a method for keeping all persons engaged in its operations informed of the provisions of the operations specifications listed in the Supplemental Information section of this safety attribute inspection (SAI)? SRRs: 119.43(c)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Does the certificate holder's manual contain general policies for the Flight/Load Manifest/Weight and Balance Control process that comply with the SRRs? SRRs: 121.135(b)(1); 121.153(b); 121.198(c); 121.665; 121.693(a); 121.693(b)(1); 121.693(b)(2); 121.693(b)(3); 121.693(b)(4); 121.693(c); 121.693(d); 121.693(e); 121.695(a)(1); 121.695(a)(2); 121.695(a)(3); 121.695(b); 121.697(a)(1); 121.697(a)(2); 121.697(a)(3); 121.697(a)(4); 121.697(a)(5); 121.697(b); 121.697(c); 121.697(d); 121.697(e)(1); 121.697(e)(2); A.096; A.097; A.098; A.099; E.096	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.	Does the certificate holder's manual reference the appropriate Federal Aviation Regulations listed in the Supplemental Information section of this safety attribute inspection (SAI)? SRRs: 121.135(b)(3)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Does the certificate holder's manual contain the duties and responsibilities for personnel who will accomplish the Flight/Load Manifest/Weight and Balance Control process? SRRs: 121.135(b)(2); 121.135(b)(9); 121.135(b)(21)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Does the certificate holder's manual include instructions and information for personnel to meet the requirements of the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	SRRs: 121.135(a)(1)	
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SAI Section 1 - Procedures Attribute Drop-Down Menu	
1.	No procedures, policy, instructions or information specified.
2.	Procedures or instructions and information do not identify (who, what, when, where, how).
3.	Procedures, policy or instructions and information do not comply with CFR.
4.	Procedures, policy or instructions and information do not comply with FAA policy and guidance.
5.	Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.).
6.	Procedures, policy or instructions and information unclear or incomplete.
7.	Documentation quality (e.g., unreadable or illegible).
8.	Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9.	Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
11.	Other.

SAI Section 2 - Controls Attribute

Objective: Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the DCT are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the system to ensure that the most important policies, procedures, or instructions and information will be followed.

Controls may be in the form of administrative controls, which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to questions regarding who, what, when, where, and how. Controls may also be in the form of engineered controls, such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).

Tasks

To meet this objective, the inspector must accomplish the following tasks:

1. Review the control questions below.
2. Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the controls that it has documented.

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Are the following controls built into the Flight/Load Manifest/Weight and Balance Control process:	
1.1.	Is there a control in place to ensure that the certificate holder blocks off seats or compartments during passenger emplaning, using procedures in its system in order to remain within center of gravity (CG) limits?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.2.	Is there a control in place to ensure that weight and balance was computed accurately and within limits?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	Is there a control in place to ensure that the certificate holder randomly checks declared cargo weights furnished by air freight forwarders in order to assure the use of accurate load manifests and weight and balance computations?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4.	Is there a control in place to ensure that aircraft were loaded in accordance with the load plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Does the certificate holder have a documented method for assessing the impact of any changes made to the controls in the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI Section 2 - Controls Attribute Drop-Down Menu	
1.	No controls specified.
2.	Documentation for the controls do not identify (who, what, when, where, how).
3.	Controls incomplete.
4.	Controls could be circumvented.
5.	Controls could be unenforceable.
6.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
7.	Other.

SAI Section 3 - Process Measurement Attribute

Objective: Process measurements are used by the certificate holder to measure and to assess its processes, to identify and to correct problems or potential problems, and to make improvements to the processes. The questions in this section of the DCT are designed to assist the inspector in determining if the certificate holder measures or assesses information to identify, analyze, and document potential problems with the process. Process measurements are a certificate holder's internal evaluation or auditing of the most important policies, procedures, or instructions and information associated with an element.

To prevent the duplication of work, process measurements are most commonly addressed through a combination of auditing features contained in both the certificate holder's safety program/internal evaluation program (for operations and cabin safety related issues) and the auditing function of the Continuous Analysis and Surveillance System (for airworthiness or maintenance/inspection related issues). The director of safety and the quality assurance department often work together to accomplish this function for the certificate holder. This approach requires amendment of the safety program/internal evaluation program audit forms or checklists and the Continuous Analysis and Surveillance System audit forms or checklists to include the specific process measurements for each element.

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the process measurement questions below.
2.	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the process measurements that it has documented.

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's Flight/Load Manual/Weight and Balance Control process include the following process measurements:	
1.1.	Process measurements that would reveal that the certificate holder blocks off seats or compartments during passenger emplaning, using procedures in its system in order to remain within CG limits?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.2.	Process measurements that would reveal that weight and balance was computed accurately and within limits?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	Process measurements that would reveal that the certificate holder randomly checks declared cargo weights furnished by air freight forwarders in order to assure the use of accurate load manifests, and weight and balance computations?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4.	Process measurements that would reveal that aircraft were loaded in accordance with the load plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Is there a process measurement or process measurements that would reveal if the certificate holder's policy, procedures, instructions, and information were not followed?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.	Does the certificate holder document its process measurement results?	<input type="checkbox"/> Yes

		<input type="checkbox"/> No, Explain
4.	Does the certificate holder use its process measurement results to improve its programs?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Does the organization that conducts the process measurements have direct access to the person with responsibility for the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI Section 3 - Process Measurement Attribute Drop-Down Menu	
1.	No process measurements specified.
2.	Documentation for the process measurements does not identify (who, what, when, where, how).
3.	Inability to identify negative findings.
4.	No provisions for implementing corrective actions.
5.	Ineffective follow-up to determine effectiveness of corrective actions.
6.	Resources requirements (personnel, facilities, equipment, technical data).
7.	Other.

SAI Section 4 - Interfaces Attribute

Objective: Interfaces are used by the certificate holder to identify and manage the interactions between processes. The questions in this section of the DCT are designed to assist the inspector in determining whether or not interactions between the policies, procedures, or instructions and information associated with other independent processes within the certificate holder's organization are documented. Written policies, procedures, or instructions and information that are interrelated and located in different areas within the certificate holder's system must be consistent and complement each other. For the interfaces to be effectively managed, the certificate holder's system should identify and document the interfaces.

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the interfaces associated with the Flight/Load Manifest/Weight and Balance Control process that have been identified along with the individual questions in section 1, Procedures, of this DCT.
2.	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the interfaces that it has documented.

Questions

	To meet this objective, the inspector must answer the following questions:	
	NOTE: The design job task items (JTIs) displayed with the questions in section 1, Procedures, of this DCT identify potential interfaces (by element number) for this element. .	
1.	Does the certificate holder's system properly address the interfaces that are identified along with the questions in section 1, Procedures of this DCT?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Does the certificate holder document a method for assessing the impact of any changes to the associated interfaces within the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI Section 4 - Interfaces Attribute Drop-Down Menu	
1.	No interfaces specified.
2.	The following interfaces not identified within the Certificate Holder's manual system:
3.	Interfaces listed are inaccurate.
4.	Specific location of interfaces not identified within the manual system.
5.	Other

SAI Section 5 - Management Responsibility & Authority Attributes

Objective: The questions in this section address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Identify the person who has overall responsibility for the Flight/Load Manifest/Weight and Balance Control process.
2.	Identify the person who has overall authority for the Flight/Load Manifest/Weight and Balance Control process.
3.	Review the duties and responsibilities of the person(s) documented in the certificate holder's manual.
4.	Review the appropriate organizational chart.

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder clearly identify who is responsible for the quality of the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
2.	Does the certificate holder clearly identify who has authority to establish and modify the policies, procedures, instructions, and information for the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
3.	Does the certificate holder's manual include the duties and responsibilities of those who manage the work required by the Flight/Load Manifest/Weight and Balance Control process? SRRs: 121.135(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Does the certificate holder's manual include instructions and information for those who manage the work required by the Flight/Load Manifest/Weight and Balance Control process? SRRs: 121.135(a)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Does the certificate holder clearly and completely document the responsibility for this position?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
6.	Does the certificate holder clearly and completely document the authority for this position?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
7.	Does the certificate holder clearly and completely document its qualification standards for the person having responsibility for the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
8.	Does the certificate holder clearly and completely document its qualification standards for the person having authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

9.	Does the certificate holder clearly and completely document the procedures for delegation of authority for the Flight/Load Manifest/Weight and Balance Control process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
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SAI Section 5 - Management Responsibility & Authority Attributes Drop-Down Menu	
1.	Not documented.
2.	Documentation unclear.
3.	Documentation incomplete.
4.	Other.